

## Lectotypification of *Mimosa pubescens* Vent. (Fabaceae, Mimosoideae)

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### Abstract

A lectotype is here designated for *Mimosa pubescens* Vent., the basionym of the Australian species *Acacia pubescens* (Vent.) R.Br.

### Introduction

*Acacia pubescens* (Vent.) R.Br. has a restricted distribution in the greater Sydney region of New South Wales (see Tame 1992, Tindale and Kodela 2001, Kodela and Harden 2002, Kodela 2016, OEH 2016), and is listed as a Vulnerable species (OEH 2016).

The basionym of *Acacia pubescens*, *Mimosa pubescens*, was originally published by Étienne Ventenat in the first volume of his work *Jardin de la Malmaison* (Ventenat 1803) that celebrated the collection of interesting plants from around the world in cultivation at the home of the Empress Josephine. Lack (2004: 35) notes that the number of Australian plants described in this work was “remarkably high” considering that the continent was, at that time, still largely unknown. The detailed descriptions were accompanied by fine illustrations by the famous botanical artist Redouté.

At the time of compilation of the *Acacia* treatment in the *Flora of Australia*, no type specimen had been located (Tindale and Kodela 2001) and it was later suggested that the species could have been lectotypified on the plate in the protologue (Fig. 1). However, a search was first undertaken to determine if any original material was extant. A search of international herbarium databases and examination of type images made accessible by the *Global Plants* website (JSTOR 2016) found a sheet, which was said to have originated from Ventenat’s herbarium, that could be the type of *Mimosa pubescens*. This sheet, barcode G00341443 (Fig. 2), bears a red institutional ‘Typus’ label indicating it as the ‘holotype’ of *M. pubescens*. It has a printed label bearing the words ‘Herbier de Ventenat’ and two hand-written labels annotated ‘ex H. Malm.’ (= ex horto Malmaison) in a script that is quite similar to Ventenat’s (cf. Burdet 1979). The sheet comprises two pieces of plant (as well as loose pieces in two packets); these loose pieces cannot definitively be matched but the leaves do appear to resemble the left-hand specimen more closely.

There are two main elements: one branchlet with many, somewhat crowded leaves and one inflorescence with open flowers (on the left side of the sheet), and the other (right side of sheet) with fewer, well-spaced leaves and numerous inflorescences, mostly still in bud. The illustration of *Mimosa pubescens* in the protologue (t. 21) appears to be a close match with the left-hand element on this sheet, although with a few immature inflorescences added.

Comparison with the protologue also shows that the left-hand element is more consistent with the description given there. Its leaves are relatively crowded ('rapprochées'), the leaves are 6–9 cm long ('longues de neuf centimètres') and 2.4–3.2 cm wide ('larges de trente-six millimètres') with 10–13 pairs of pinnae ('Folioles primaires dix à douze') and all flower parts visible on the specimen are described. In comparison, the other element has more widely spaced leaves that are 5.2–6.2 cm long and 1.9–2.9 cm wide with 8–10 pairs of pinnae and flowers that are mostly still in bud.

Although both elements represent the same taxon, we conclude that the two elements cannot be considered part of the same gathering, even if it could be shown that they are from the same individual plant but collected at different times. No other duplicate exists in Geneva (Callmander pers. comm.) and the only specimen at P was collected on the expedition led by Nicolas Baudin, which did not return to France until 1804. We here select the left-hand element on the sheet G00341443 as lectotype of *Mimosa pubescens* Vent., as it is more strongly in agreement with both the protologue and the plate, t. 21.

### Nomenclature

*Acacia pubescens* (Vent.) R.Br., in W.T. Aiton, *Hortus Kewensis*, 2nd edn, 5: 467 (1813)

*Racosperma pubescens* (Vent.) Pedley, A synopsis of *Racosperma* C.Mart. (Leguminosae: Mimosoideae). *Austrobaileya* 6(3): 482 (2003).

*Mimosa pubescens* Vent., *Jardin de la Malmaison* 1(1): t. 21 (1803).

**Original citation:** 'Arbrisseau originaire de la Nouvelle-Hollande'

**Lectotype (here designated):** ex H. Malm. [from the Garden of Malmaison] (G barcode G00341443, left-hand branchlet); photo: JSTOR (2016); NSW.

**Note:** the sheet (G00341443) cannot be considered to be the holotype because, as discussed above, there are two discordant elements on it. Also, note that there is no certainty these were the only specimens used by Ventenat to draw up the protologue, and the illustration should be considered part of the original material as well (Arts. 9.1 & 9.3; ICN, McNeill et al. 2012). Strictly speaking, the sheet comprises uncited specimens that are also original material rather than syntypes (Art. 9.5), since only the growing plant is clearly cited in the protologue (see Art. 40 Note 2). In choosing a lectotype, we have considered the hierarchy in Art. 9.12, preferring to select a specimen rather than the published illustration.

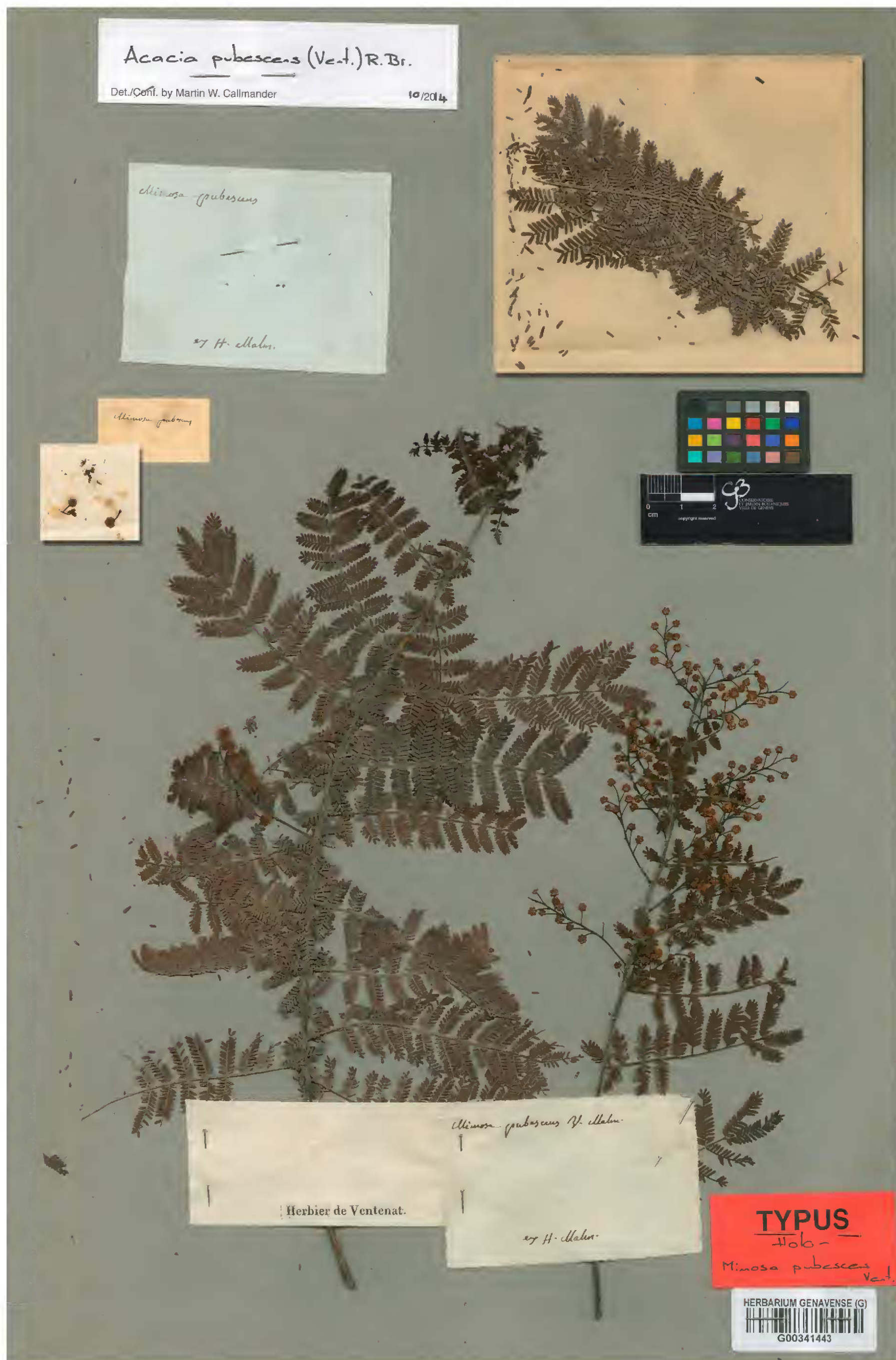
*Mimosa pubigera* Hort. Paris ex Poir. in J.B.A.P. de Monnet de Lamarck & J.L.M. Poiret, *Encyclopédie Méthodique, Botanique* Suppl. 1(1): 71 (1810), *nom. inval., pro syn.*

*Acacia mollissima* Hort. ex Willd., *Enumeratio Plantarum Horti Regii Botanici Berolinensis* 1: 1053 (1809). Type citation: "Habitat in Nova Hollandia".

Type: Nova Hollandia, *Herb. Willdenow* No. 19152 (holo: B, fide Brenan & Melville 1960: 38).



Fig. 1. Plate 21 inscribed *Mimosa Pubescens* in Ventenat (1803).



**Fig 2.** Image of sheet G00341443; left-hand element (larger branchlet) selected as lectotype of *Mimosa pubescens*, basionym of *Acacia pubescens* (photo: Herbarium of the Conservatoire botanique de la Ville de Genève).

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## References

- Brenan JPM, Melville R (1960) The Latin Name of the Black Wattle. *Kew Bulletin* 14: 37–39.
- Burden HM (1979). [Calligraphie de Ventenat] *Auxilium ad botanicorum graphicem*. <http://www.ville-ge.ch/musinfo/bd/cjb/auxilium/calligraphie.php?personne=1433> [Accessed December 2016]
- Kodala PG (2016) *Acacia pubescens* (Vent.) R.Br. *PlantNET* <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~pubescens> [Accessed October 2016]
- Kodala PG, Harden GJ (2002) *Acacia*. Pp. 381–476, in Harden GJ (ed.), *Flora of New South Wales* Vol. 2. Revised edition. (University of New South Wales Press: Sydney)
- Lack HW (2004) *Jardin de la Malmaison: Empress Josephine's Garden*. (Prestel: Munich)
- McNeill J, Barrie FR, Buck WR, Demoulin V, Greuter W, Hawksworth DL, Herendeen PS, Knapp S, Marhold K, Prado J, Prud'Homme van Reine WF, Smith GF, Wiersema JH, Turland NJ (2012) International Code of Nomenclature for algae, fungi and plants (Melbourne Code) adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011. *Regnum Vegetabile* 154. (Koeltz Scientific Books: Koenigstein)
- JSTOR (2016) *Global Plants*. <http://plants.jstor.org/> [Accessed October 2016]
- OEH (2016) Downy Wattle – profile. Office of Environment & Heritage, NSW Government. <http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10023> [Accessed October 2016]
- Tindale MD, Kodala PG (2001) *Acacia pubescens*, p. 224, in Orchard AE, Wilson AJG (eds), *Flora of Australia* Vol. 11A, Mimosaceae, *Acacia* part 1. (ABRS/CSIRO Publishing: Melbourne)
- Tame T (1992) *Acacias of southeast Australia*. (Kangaroo Press: Kenthurst)
- Ventenat EP (1803) *Jardin de la Malmaison* 1(1): t. 21.